

XVI. *Descriptions of sixteen new species of parasitic Cynipidæ, chiefly from Scotland.* By P. CAMERON.

[Read July 4th, 1883.]

*Allotria ruficollis*, n. s.

Black; antennæ and legs yellow; head, prothorax, breast, metapleura wholly, mesopleura at the sides, and base of abdomen, red; tegulæ piceous. Wings hyaline; nervures dull yellowish. The antennæ are longer than the body; 3rd joint straight and little longer than the 4th; the last a little longer than the preceding; the apical joints are somewhat fuscous. Base of abdomen pilose. Radial cellule one-half longer than broad, closed. Length,  $1\frac{1}{2}$  mm. Male.

In coloration this species comes very close to *A. pleuralis*, Cam., but that has not the mesopleura black, the antennæ are only yellow at the base, the radial cellule is not much longer than broad, and it is also a smaller species.

*Hab.* Mull, in June.

*Allotria ruficeps*, n. s.

Black; pronotum, mesopleura on lower side, and breast, piceous-red; legs reddish yellow; joints 1—4 of the antennæ yellow, the rest piceous; head and petiole red. Wings hyaline; nervures fuscous. The antennæ are longer than the body; 3rd joint straight, distinctly one-fourth longer than the following; the last is not much longer than the preceding. The radial cellule is closed and not much longer than broad; the cubital nervure is traced for two-thirds of the extent of the wing. The pubescence on metathorax and base of abdomen is dense. Length,  $1\frac{1}{2}$  mm. Female.

The radial cellule is shorter than in *A. flavicornis*, and the shortness of this cellule easily distinguishes it from *A. ruficollis*, with which it has some resemblance in

coloration. It is a larger insect than *A. pleuralis*, the antennæ are somewhat longer, and have the 3rd joint longer in proportion to the 4th, and the cubital nervure is not traced in *pleuralis* at all.

*Hab.* New Galloway, in June.

*Allotria curvicornis*, n. s.

Black; the four or five basal joints of antennæ fuscous; mouth piceous; legs dull testaceous; the coxæ and femora almost piceous at the base. Wings hyaline; nervures fuscous. The antennæ are longer than the body, being as long as the fore wings; the 3rd joint is slightly and the 4th and 5th distinctly curved and slightly thickened; the 6th is very slightly bent, but not so much as the 3rd. The radial cellule is of moderate size, longer than broad; its outer margin is curved; the cubital nervure is only traced at the base. The pubescence on the metathorax is distinct; the petiole piceous. Length,  $1\frac{3}{4}$  mm.

Allied to *A. longicornis*, but differing from it in its shorter radial cellule, somewhat shorter antennæ, these in *longicornis* not having the 4th and 5th joints curved.

*Hab.* Glen Lyon, in July.

*Allotria Mullensis*, n. s.

Black; head dull ferruginous, vertex piceous; pleura almost piceous; five basal joints of antennæ pale testaceous, the rest fuscous; legs dull testaceous; coxæ and femora fuscous. Two basal joints of antennæ enlarged, as long as the 3rd, which is longer than the 4th; joints 3—5 thin; the rest much thicker, becoming thicker towards the apex; last joint one-half longer than the preceding. Metathorax and coxæ covered with a dense white pubescence. Wings hyaline, the base yellowish; nervures pallid-yellow; radial cellule closed, minute, almost semicircular, not being much longer than broad; nervures thick; cubital nervure shorter than the length of radial cellule; fringe on apex of wing longish. Male. Length,  $\frac{3}{4}$  mm.

Comes nearest to *A. brevis*, Thoms., but is readily known from it and every species known to me by the shortness of the radial cellule, which differs also in being

semicircular, not triangular, as is usual; the reddish head and piceous pleuræ also distinguish it from *A. brevis*.

*Hab.* Mull, in June.

*Allotria salicis*, n. s.

Black; face, pleura, and base of abdomen piceous; antennæ fuscous, the base testaceous; legs testaceous; the four posterior coxæ, the base of four anterior femora and the greater part of posterior, light fuscous. Wings hyaline; radial cellule closed, double as long as broad; nervures pale yellow. Antennæ a little longer than the body; 2nd joint thick, oval, a little more than one-half the length of 3rd; 4th a little longer than 2nd; the joints become gradually and slightly thicker towards the apex. The scutellum, metathorax, and base of abdomen are covered with a longish white pubescence; the rest of thorax and head sparsely pilose. Female. Length, 1—1½ mm.

From *A. minuta* this species may be known by its darker antennæ and legs, longer radial cellule; the latter is a little shorter than it is in *longicornis*, and *salicis* differs also from that species in its lighter-coloured legs, much shorter antennæ, and piceous thorax, it being also a smaller species. In *salicis* there are two indistinct sutures on the mesonotum, which, however, only extend from the scutellum to the middle, and there is an indistinct longitudinal suture on the lower side of mesopleura. It seems to belong to Foerster's genus *Hemicrisis*.

Bred from a black *Aphis* on *Salix pentandra* from the Kilpatrick Hills.

*Allotria piceomaculata*, n. s.

Head and thorax piceous; abdomen black; pleuræ dark ferruginous; antennæ black, base testaceous; legs yellow. The antennæ are longer than the body, not much thickened towards the apex; 3rd joint nearly double the length of 4th. Wings hyaline; nervures fuscous; radial cellule open, double as long as broad; cubital nervure extending beyond the middle. Length, 1 mm.

Readily known by the piceous head and thorax and long antennæ, which are longer than in the other species with open radial cellule.

*Hab.* Dumfries, in June.

*Psichacra glottiana*, n. s.

Black, shining; apex of coxæ, trochanters, base of femora and their apical half, tibiæ and tarsi, reddish. Wings hyaline; nervures testaceous. The antennæ are longer than the body; the 3rd and 4th much thinner than the other joints; 5th thicker; the rest of nearly equal thickness; 3rd joint distinctly longer than 4th; 5th shorter than latter; 6th nearly of the same size as 5th; the others to the 13th shorter, oblong, and covered sparsely with microscopic bristle-like hairs; the basal joints of the flagellum are somewhat piceous. Scutellar cup oval, rather shallow, a round fovea at its apex; foveæ at base of scutellum moderately large and deep. Below the cup the scutellum is smooth and shining; lower down coarsely punctured. The hair on metanotum moderate in length, dull silvery white; hair-fringe on base of abdomen grey. Abdomen slightly aciculated on basal half; apical smooth, shining. Radial cellule closed, a little longer than broad; margin deeply fringed; cubital nervure extending beyond the middle. The legs are pilose. Length, nearly  $3\frac{1}{2}$  mm.

*Hab.* Cambusland, on banks of Clyde.

*Psichacra similis*, n. s.

Black, shining; antennæ (except at base and apex) and legs (except base of coxæ) red. Wings clear hyaline; nervures testaceous. Antennæ of the length of the body, without a distinct club; 3rd and 4th joints about equal; 5th a little shorter; 6th scarcely tapering at base and apex, the following distinctly so; 9th to 12th oval. Scutellar cup moderately deep, oval; sides coarsely punctured all round; foveæ at base of scutellum moderate; the outer margin striated. The hair on metanotum is scattered and sparse. The male has the antennæ nearly three-quarter times longer than the body; the 3rd joint is, if anything, shorter than 4th. In colour there is no difference between the two sexes, and the wings are as in the other species. Length, 4—5 mm.

Allied to *P. longicornis*, Htg. (*gracilis*, Dbm. sec. Thoms.), but that is a slightly larger species. The tegulæ with it are red; the foveæ at base of scutellum are larger, deeper, and the outer margin is red or piceous, and is not striated as in *similis*. The hair on the metanotum is much thicker and denser, the antennæ are shorter, the joints thicker, especially at base of flagellum, and the antennæ are entirely red, as are also the legs. As with most of the species, the base of abdomen is sometimes red.

*Hab.* Cambusland, along the banks of the Clyde, July.

*Psichacra Marshalli*, n. s.

Black; antennæ fuscous-black; legs reddish testaceous; coxæ for the most part black; tegulæ testaceous. Antennæ much longer than the body (nearly double), filiform; 3rd joint thickened, slightly curved, longer than 4th. Head and thorax opaque, alutaceous. Scutellar cup small, narrow, longer than broad, acutely pointed at base. Foveæ at base of scutellum large; their outer border piceous, and ending in an acute tooth. Metanotum densely hairy. Wings hyaline, but with a slight fuscous tinge; nervures testaceous. Length, 3 mm.

The opaque alutaceous head and thorax, small narrow cup of scutellum, and thickened curved 3rd joint of antennæ, easily enable this species to be separated from *longicornis* and *similis*.

*Hab.* Barnstaple (*Rev. T. A. Marshall*).

*Trybliographa nigricornis*, n. s.

Black; extreme apex of coxæ and trochanters, knees broadly, tibiæ and tarsi, testaceous; the latter two infuscated towards the apex. Antennæ not much shorter than the abdomen and thorax together; 3rd and 4th joints equal in length; 5th a very little shorter; 6th to 12th moniliform, longer than broad, striated, thicker than the basal joints; last joint not much thinner, but longer than penultimate. The thorax is covered with a scattered pale pubescence; the scutellum rugose, its cup almost oval; sides of metathorax covered with long griseous hair. Abdomen a little longer than the head and thorax together, somewhat compressed; the hair-

fringe dense, griseous. Wings hyaline, slightly yellowish at the base; cubital nervure continued to the end of wing; tegulæ dull black. The legs are covered with longish stiff-looking, closely-set, hair of a white glistening colour. The male has the antennæ nearly one-half longer than the body; the 3rd joint is a little shorter and thinner than the 4th, which is swollen, and is shorter than the 5th. Length, 4 mm.

This species comes nearest to *Eucoila albipennis*, Thoms. (which is in all probability identical with *diaphanus*, Htg., and *nigripes*, Gir.), but is sufficiently distinguished from it by its longer and entirely black antennæ and complete cubital nervure.

*Hab.* Clydesdale; Dalry, Ayrshire.

*Trybliographa testaceipes*, n. s.

Black; apex of coxæ, trochanters, femora (except in the middle at the sides), tibiæ and tarsi, testaceous; flagellum piceous-red. Antennæ as long as the thorax and abdomen; 3rd joint a little shorter than the 4th; 5th longer than either the 4th or 6th; 6th to 12th moniliform, longer than broad, of nearly equal length; 13th longer and thicker than 12th. Thorax almost glabrous; scutellum obscurely rugose, punctured; the cup oval. Sides of metathorax aciculated, almost glabrous. Abdomen a little longer than the head and thorax together, slightly compressed, the hair-fringe weak, dull white. Wings clear hyaline; nervures yellow; cubital nervure obsolete. Length, scarcely 2 mm.

In coloration this species agrees best with *T. scutellaris*, Htg. sec. Gir., but that is a larger and stouter species, and has the 3rd joint of the antennæ longer than the 4th, and the cubital nervure complete. It comes near to *diaphanus*, Htg. = *albipennis*, Thoms., but the latter is a longer species; the antennæ are shorter, and with the 5th joint of the length of the 3rd and 4th; the legs are much darker, the femora being almost entirely black, and sometimes more or less of the tibiæ.

*Hab.* Cambusland; Dalry.

*Erisphagia longipes*, n. s.

Black; legs with coxæ piceous-red, the femora suffused with fuscous. Wings scarcely hyaline; nervures fuscous. The antennæ are filiform, much longer than the body; all the joints of nearly the same length. Radial cellule longer than broad, the nervures curved; cubital nervure extending to near the apex of the wings. Abdomen shorter than the thorax, a little compressed, the base piceous. Pleuræ faintly aciculated, the sides of meta-thorax sparsely pilose; the rest of the body glabrous. Wings with long cilia. Legs long. Male. Length,  $1\frac{1}{4}$  mm.

Only two species have been referred to this genus, namely, *E. depilis*, Gir., and *E. curta*, Gir., and from these the present species is easily recognised by its totally piceous-red legs, the others having them reddish only at the knees, as in *depilis*, or the knees and anterior tibiæ, as in *curta*.

*Hab.* Alsasua, Spain (*Dr. David Sharp*).

*Melanips femoralis*, n. s.

Black; the greater part of anterior femora, the apical fourth of middle, and the apex of posterior tibiæ and tarsi, fulvous-testaceous; the apex of posterior tibiæ and tarsi more or less fuscous. Antennæ nearly as long as the body, becoming very slightly thickened towards the apex; 3rd joint nearly one-fourth longer than the next, the other joints becoming gradually shorter to the penultimate, which is not half the length of the last. Sutures on mesonotum narrow, becoming obsolete towards the base of mesonotum; the puncturing on scutellum is not much stronger than on mesonotum, except at sides, which are rugose; mesopleura for the greater part smooth and shining; coxæ opaque, finely punctured, except behind, where they are smooth and shining. Abdomen not much longer than thorax, smooth, shining, semisessile, the base aciculated, the hair on it sparse; nervures as in *opacus*. Length, 4 mm.

From *M. opacus* the present species may be known by its darker-coloured femora and lighter-coloured tibiæ and tarsi, by the smaller size of the foveæ at base of scutellum, less strongly punctured scutellum, less

clearly impressed sutures on mesonotum, and less hairy thorax. *M. longitarsis* is readily distinguished from it by the 3rd and 4th joints of the antennæ being equal in length.

*Hab.* Bonar Bridge, Sutherlandshire, in June.

*Aegilips scotica*, n. s.

Black; covered with a longish scattered pale down. Antennæ reddish brown beneath from the middle of 1st joint. Mouth and palpi brown; tegulæ testaceous; coxæ black, except at extreme apex; trochanters and posterior femora for the most part, and the anterior to a less extent, fuscous-black; the rest of legs dull testaceous obscured with fuscous. Wings hyaline; nervures fuscous. Mesonotum almost shining, very slightly and closely punctured; furrows deep; there is a transverse furrow at base of scutellum; in front of this and between the two lateral furrows is a shallow pit, which is wider than long. Scutellum rugose, terminating in a short, blunt, thick spine, which is obliquely truncated at the top. Metathorax rugose, reticulated; in centre of metanotum are two smooth fields, the upper being the largest. Collar striated in front. Below the tegulæ on mesopleura is a triangular striated part bounded by a ridge. Petiole rugose, shorter than broad. Abdomen shorter than thorax, smooth, shining. Antennæ as long as the body; 3rd and 4th joints equal. Male. Length, nearly 4 mm.

This species has the greatest resemblance to *A. subulifera*, Thoms., but that species has the mesonotum semiopaque, transversely striated, and the petiole much longer than broad.

*Hab.* Glen Moriston, in June.

*Aegilips ruficornis*, n. s.

Black; antennæ (except at base and apex), and legs red; coxæ black, except at apex; posterior tarsi and apex of tibiæ fuscous. Antennæ if anything longer than the body, becoming thickened towards the apex; 3rd and 4th joints subequal; 5th shorter; last joint one-half longer than preceding. Mesonotum smooth, shining; sutures distinct, but shallow; transverse

suture in front of scutellum much deeper and narrower. Scutellum smooth in front; the sides have some irregular and indistinct reticulations; behind it is rugose, but not strongly above; below reticulated, the two parts being separated by a keel; the foveæ in front are distinct, smooth; behind there is a wide shallow fovea at each side. Metathorax rugose, reticulated indistinctly in the middle of metanotum. Petiole coarsely striated, broader than long. Abdomen smooth, shining, shorter than abdomen. The body is covered with a longish fuscous pubescence. On the coxæ the hair is white. Wings hyaline; nervures testaceous. Pronotum and episternum obscurely punctured. Length, 4 mm.

The smooth scutellum allies this species to *A. nitidula*, Dlm., but it is a stouter insect; the antennæ are longer, the sutures on mesonotum are scarcely crenulated, the foveæ at base of scutellum are distinct, and the antennæ and legs are red, not yellow, as in *nitidula*. The smooth scutellum separates it from *Dalmani* and *curvipes*.

*Hab.* Bishopton.

*Aegilips striolata*, n. s.

Black; antennæ reddish testaceous, more or less fuscous above, especially towards the apex; legs testaceous; apex of femora and tibiæ yellow; posterior tarsi and apex of tibiæ fuscous. Antennæ longer than the body; 3rd joint distinctly longer than the 4th; 4th and 5th subequal; last joint not much longer than preceding. Mesonotum scarcely shining; sutures distinct, crenulated; in front of scutellum transversely striated; a large shallow fovea longer than broad in front of transverse suture at scutellum. Pronotum and mesopleura above finely punctured, opaque. Scutellum rugose, smooth and shining at the base; looked at from the side it is bluntly triangular, above bluntly conical; foveæ obsolete. Metathorax rugose, reticulated; bounding the centre of the metanotum are two keels, which widen out in the centre; between these is a straight keel. Petiole a little longer than broad, rugose. Abdomen smooth and shining. Wings hyaline; nervures yellowish; tegulæ testaceous. Length,  $3\frac{1}{2}$  mm.

In general appearance this distinct species most nearly resembles *A. nitidula*, but the striated mesonotum,

punctured pronotum and scutellum, sufficiently separate it from the common species; in having the pronotum punctured it agrees with *A. puncticollis*, Reinh. (which I regard as only a variety of *Dalmani*), but the striated mesonotum, the large foveæ at apex of mesonotum, the less strongly punctured scutellum, the almost obsolete scutellar foveæ, mark it out as a very different species. *A. subulifera*, which has the mesonotum transversely striated, differs in the scutellum ending in a blunt spine.

*Hab.* Mugdock, near Glasgow.

The following table will, I believe, enable our species of *Aegilips* to be identified. *A. Dalmani*, I may add, is the most variable species; the legs vary from ferruginous to piceous, and the posterior femora, tibiæ, and tarsi may be for the most part black or fuscous; the antennæ may be entirely black, or brownish, or reddish on the under side; while the collar and the apex of mesonotum are sometimes aciculated, or even punctured. It is often found on windows.

SYNOPSIS OF THE BRITISH SPECIES OF *Aegilips*:—

- 1 (8). Scutellum conical, not ending in a spine.
- 2 (5). Scutellum smooth, impunctate in front and at the sides.
- 3 (4). Scutellar foveæ obsolete; legs and antennæ bright yellow .. .. . *nitidula*, Dlm.
- 4 (3). Scutellar foveæ distinct; legs and antennæ red .. .. . *ruficornis*, Cam.
- 5 (2). Scutellum rugose.
- 6 (7). Mesonotum transversely striated, a large fovea at its apex; scutellar foveæ almost obsolete; legs testaceous and yellow .. .. . *striolata*, Cam.
- 7 (6). Mesonotum not transversely striated; scutellar foveæ distinct; legs ferruginous .. .. . *Dalmani*, Reinh.
- 8 (1). Scutellum ending in a spine.
- 9 (10). Mesonotum semiopaque, transversely striated; petiole much longer than broad (in male); foveæ at base of scutellum obsolete .. .. . *subulifera*, Thoms.
- 10 (9). Mesonotum not striated; scutellar foveæ large.
- 11 (12). Spine short, obliquely truncated at apex, not one-fourth of length of scutellum; legs fuscous; petiole shorter than broad .. .. . *scotica*, Cam.
- 12 (11). Spine long, curved, more than one-third of length of scutellum; legs and antennæ red; petiole a little longer than broad .. .. . *armata*, Gir.